the layer of ferromagnetic material comprises positive first polarization domains and negative second polarization domains.

20. (New) The acoustic wave device as claimed in claim 19, wherein the second electrode is deposited on a surface of the layer of ferroelectric material.

21. (New) The acoustic wave device as claimed in claim 19, further comprising a cover resting on the substrate, said cover having the second electrode, to create a space between said second electrode and the layer of ferroelectric material.

22. (New) The surface wave device as claimed in claim 21, wherein the cover is configured to be removed from the layer of ferroelectric material.

23. (New) The acoustic wave device as claimed in claim 19, wherein the layer of ferromagnetic material comprises unpolarized third domains to influence directivity of the acoustic waves.

24. (New) The acoustic wave device as claimed in claim 19, wherein the first domains and second domains are formed as a series of linear domains.

25. (New) The acoustic wave device as claimed in claim 24, wherein the series of linear domains further include unpolarized domains.

26. (New) The acoustic wave device as claimed in claim 19, wherein the first domains and the second domains are in a matrix arrangement.

27. (New) The acoustic wave device as claimed in claim 26, further including unpolarized domains.

28. (New) The acoustic wave device as claimed in claim 19, wherein the ferroelectric material is lead titanium zirconium oxide.

29. (New) The acoustic wave device as claimed in claim 28, wherein the first electrode is a platinum/titanium alloy.

30. (New) The acoustic wave device as claimed in claim 19, wherein the substrate is made of silicon.

31. (New) The acoustic wave device as claimed in claim 19, wherein the second electrode is made of aluminum.

32. (New) The acoustic wave device as claimed in claim 28, further comprising at least one electrode whose surface is defined by two parameters y and x satisfying an equation of $y = f(x)$, where f is a real function.

33. (New) The acoustic wave device as claimed in claim 28, wherein a spatial polarization distribution in a plane of the layer of ferroelectric material follows a geometrical law so that a resulting polarized surface is defined by two parameters y and x satisfying an equation $y = f(x)$, where f is a real function.

34. (New) A process for manufacturing a surface wave device as claimed in claim 29, comprising:

producing the layer of ferroelectric material on the surface of the substrate having the first electrode;

forming the layer of ferroelectric material of positive and negative polarization domains by applying an electric field greater than a coercive field of the ferroelectric material, a polarity of which determines a direction of polarization of the domains; and

producing the second electrode opposite the ferroelectric material.